LINCOLN/LANCASTER COUNTY PLANNING STAFF REPORT

for April 13, 2005 PLANNING COMMISSION MEETING

PROJECT #: Change of Zone #04066, Miscellaneous #04015, Miscellaneous

#05007

Note: This is a combined staff report for related items. This report contains a single background and analysis section for all items.

PROPOSAL: To amend Title 27, Zoning Ordinance, Title 26, Land Subdivision and the City of Lincoln Design Standards to adopt various screening and landscape amendments.

CONCLUSION: In conformance with the Comprehensive Plan.

RECOMMEND	DATION:
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Change of Zone #04066 Approval
Miscellaneous #04015 Approval
Miscellaneous #05007 Approval

GENERAL INFORMATION:

HISTORY:

- 1. October 14, 2004 Streetscape amendments presented to the Mayor's Neighborhood Roundtable.
- 2. 2004 Planning Director withdrew the two proposals on pending and department reworked elements from those proposals.
- 3. 2002 Public Way Corridors proposal placed on pending by Planning Commission, due to opposition to wider (120'-130') rights of way for arterials in new development areas.
- 4. 2002 Comprehensive Plan adopted, including the wider right of way requirements.
- 5. 2001 Entryway Corridors proposal placed on pending by Planning Commission due, to opposition of owners along I-80 to extensive new design standards for interstates.

Three years ago, the proposed "Entryway Corridors District" ordinance was heard by the Planning Commission and placed on the pending list. A little over two years ago, a package of proposed ordinance amendments referred to as "Public Way Corridors" was heard by the Planning Commission and placed on the pending list. Since that time, many circumstances have changed: the Comprehensive Plan was adopted, other studies have been completed, and several new Planning Commissioners were appointed.

The Planning Department has reconsidered these proposals in light of the changed circumstances, evaluated the likelihood of specific recommendations being approved, weighed the impact of specific proposals on the appearance of the community as well as the impact on the property owners who will develop and acquire property, and put these proposals into the context of other issues and initiatives. As a result of this review, the Planning Department withdrew the applications on pending and is submitting a new set of applications to the Planning Commission and City Council for public discussion and hearings.

The "Entryway Corridors District" amendments contained a set of special design standards that were intended to regulate the development of properties abutting the I-80 and I-180 corridors. The standards were based on a consultant report completed in 2000 that analyzed these corridors. The report and ordinance amendments were prepared as a result of the general interest expressed by City Council members in improving the appearance of the city's major entryways. A companion report looked at the prospects for enhancing the West Cornhusker corridor between the airport and I-180, and that study did result in some landscape improvements near the airport. Continuing Council interest in the visual appearance of the city also has been demonstrated by:

Neighborhood Design Standards to ensure that new residential construction in the pre-1950 city limits is compatible with the character of the surrounding neighborhoods. Special state and local restrictions for development in the environs of the State Capitol, A more restrictive sign code regarding billboards, adopted in 2000, which included

special limitations at the intersection of key roads with the city boundaries. Close review of development proposals like cellular towers that might have adverse visual impacts.

Revitalization plans for public and private land in the Antelope Valley area east of the downtown.

The focus on the interstates was well intended. Interstate 80 and Interstate 180 carry more traffic and are on view to more passers-by and visitors to Lincoln than any other roads. Much of the bordering land is undeveloped, providing the opportunity to avoid mistakes of the past allowed along the city's older entryways.

The proposed special design standards for buildings and landscaping of properties abutting the freeway rights of way included:

Special 50 foot landscape buffers and 100 foot building/sign setbacks

Service/loading areas restricted from facing the freeways

Masonry comprising at least 65% of the walls facing the freeways

Berms or solid planting along the freeway frontage that is 15-20 feet in height

Landscaping from a special pallette of native materials

Lighting shielded and limited in brightness like the parking lots in newer zoning districts Screening of rooftop mechanical equipment Special sign controls (withdrawn from the package after the original submittal)

"Public Way Corridors" was the term used in the 1994 Comprehensive Plan for wider, multiple-use arterial corridors proposed in the city's future growth areas to better accommodate the demands of vehicular and pedestrian circulation, utilities, lighting and landscaping. The concept was carried into the 2025 Comprehensive Plan adopted in 2002, and the new right-of-way width for arterial streets as stated in the Plan since has been the basis for required street dedications in the developing areas. The original term was dropped in later communications, but is used in this memo for convenience. After a consultant study and adoption of a Comprehensive Plan amendment in 1999-2000 referencing this concept, City staff developed a proposed set of ordinance amendments in 2000-2001. Those proposed amendments went through public reviewand to the Planning Commission for public hearing in April 2002. Numerous objections were raised by speakers at the hearing, and the Planning Commission put the proposal on pending.

The proposed ordinance amendments were intended to address a variety of issues, with some provisions only applicable to the new, wider arterials and others applicable to the older arterials as well. Some of the amendments addressed issues of visual appearance, but there were other objectives as well. The proposals included:

Revise the standard in the Subdivision Ordinance for arterial street right-of-way width in developing areas from 100 feet to 120-130 feet.

Provide compensating development flexibility in exchange for dedicating this additional right of way: treating the additional land as easement so that it can be included in front yard requirement, reducing the front yard requirement in certain districts, and reducing the minimum lot depth requirement for residential lots.

Allow street trees to be planted in the wider rights of way of these new arterials.

Require that some landscaping be planted along with fences that are installed to meet the City's screening requirements along arterial streets

Require that any new fences along the rear of double frontage lots abutting arterial streets be constructed with openings, so that the property owners can access the right-of-way for maintenance

Require a minimum 12 foot front yard landscape area for auto sales lots in the City's older business districts, which currently can be paved right up to the front property line. Increase the density of parking lot screening, eliminate the provision that allows a reduction in screening with increased setbacks, and require additional parking lot trees.

Provide standards for property owners who want to enhance landscaping in street rights-of-way.

Amend the phasing and bonding requirements for street trees and sidewalks to make them less cumbersome for developers.

Require that landscaping be installed by certified and approved nurserymen or contractors.

COMPREHENSIVE PLAN SPECIFICATIONS:

F-87 The overall objectives of the transportation plan include:

Developing a balanced transportation system that meets the mobility needs of the community and supports Lincoln and Lancaster County's land use projections and plan.

Using the existing transportation system to its best advantage.

Creating a sustainable transportation network that minimizes energy consumption and environmental pollution.

Increasing the use of alternate means of transportation, including public transportation, bicycle transit, and pedestrian movement, by improving and expanding facilities and services and encouraging compact, walkable land use patterns and project designs.

Continuing Lincoln's street and trails network into newly developing areas.

Designing a street and road improvement program that is both physically attractive and sensitive to the environments of urban neighborhoods.

Maximizing the safe and efficient movement of railroad traffic, while minimizing street conflicts and reducing the creation of barriers created by rail corridors.

Enhancing aviation facilities, while minimizing their effect on surrounding land uses.

F-90 Pedestrians should be visible to motorists and other pedestrians. Pedestrians should be separated from motorists and bicyclists.

ANALYSIS:

1. The following changes are proposed:

Cross section

- N Adopts typical arterial street cross-sections and location of utilities, sidewalks, and landscaping for 120 foot and 130 foot arterial streets.
- N Adopts typical design standard with trail instead of sidewalk.
- N Accommodates the right turn traffic lanes: 70 feet from centerline to accommodate right turn lanes and 60 feet on the opposite side, to ensure an adequate safety zone between the curb and sidewalk.

Flexibility For Private Development Adjacent to Arterial Streets

- Where 120 feet of right of way or more is required, and the additional ROW would otherwise reduce the develop-ability of the site, the outer 10 feet of the right of way width could be in an easement reserved for street, sidewalk, landscape screen and utility purposes. This will allow the easement area to be part of the abutting lots.
- N Where additional screening and landscaping is provided, the front yard in the B-2, B-5, H-4, and I-3 zoning districts could be reduced from 50 feet to

30 feet from a 120 foot street ROW, and from 50 feet to 20 feet when an additional 10' of ROW is required for right turn lanes.

Street trees & Landscape screening

- N Plant street trees in the right of way along arterial streets, where they can protect some pedestrians and improve the streetscape, unless there is not adequate space.
- N Street trees may be planted in the right of way of state highways but only with permission from the NDOR. If permission is not granted the trees shall be planted on private property adjacent to the right of way.
- N The screen along major streets with double frontage lots shall consist of only plants and/or earth berms, or a combination of fence and landscaping. fences and/or walls may provide a maximum of 50% of the total screening requirement. The current practice is to install a 6' high fence. The proposed text is to allow fences, but require landscaping to be provided with the fence to relieve the monotony of a bare fence.
- N Minimum 6 foot landscaped area for new development in B1, H1, H2 and H3 districts.
- A 36 inch wide opening or gate shall be provided in the fence for each double frontage lot to access the area between the street pavement and the property line for maintenance. Two adjoining lots may share the same opening. Such opening may be waived if a property owners association is created for the maintenance of other common facilities and will assume the maintenance of the area between the curb and the property line including the shrubs and sidewalk.
- N Increases density of screening requirements for parking lots:
 - P Eliminates reduction in screening when parking lots have additional setbacks
 - P Increases density of the four foot screen in front yard from 60% to 90%.
 - P Add screening requirement for driving aisles, vehicle service and queuing areas.
- N Increases tree canopy in parking lots:
 - P Adds additional deciduous shade trees in parking lot: increases the ratio of parking lot trees from 1 per 10,000 sq ft. to 1 per 6,000 sq ft.

- P Simplifies the method that determines the required number of shade trees.
- P Increase minimum planting area from 36 square feet to 50 square feet.
- Adopts new standards for landscaping called "Design Standards for Landscaping Streetscapes, Medians, Boulevards, Roundabouts, and Arterial Streets." These standards were developed by the Parks Department to govern plantings desired by and paid for by the private sector in nearby street right of way.

Other Screening

N Refuse areas, waste removal areas, service yards, storage yards, recycling areas, exterior work areas, and ground level mechanical equipment within 150 feet of residential areas and/or public streets shall be screened.

Grandfather Clause

These revisions would only apply to new applications made after approval by the City.

2. Planning staff believes the proposed text changes will substantially improve street aesthetics as intended in the previous applications; however, the new proposals are less extensive and in may cases developers are compensated by reduced street setbacks which provides more develop-able land.

Prepared by:

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DATE: March 31, 2005

APPLICANT: Marvin Krout

Planning Director

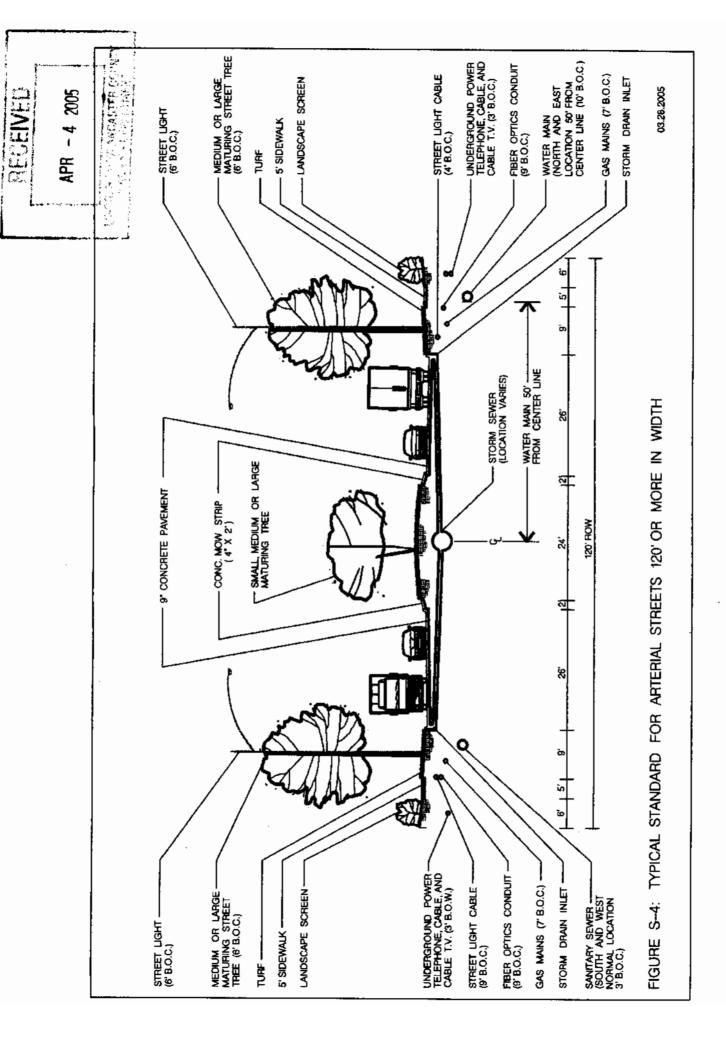
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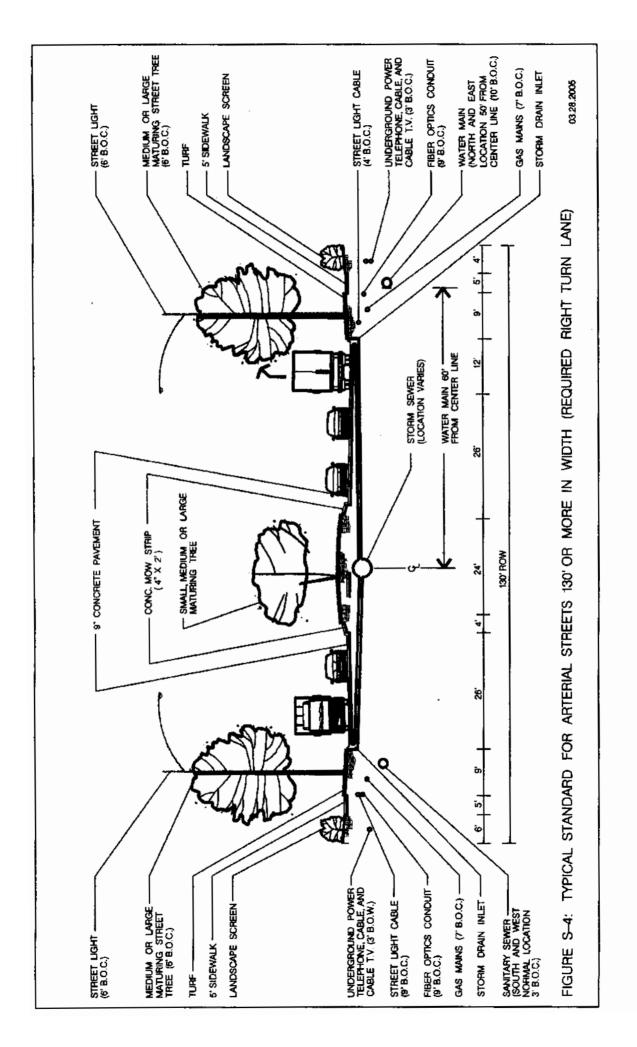
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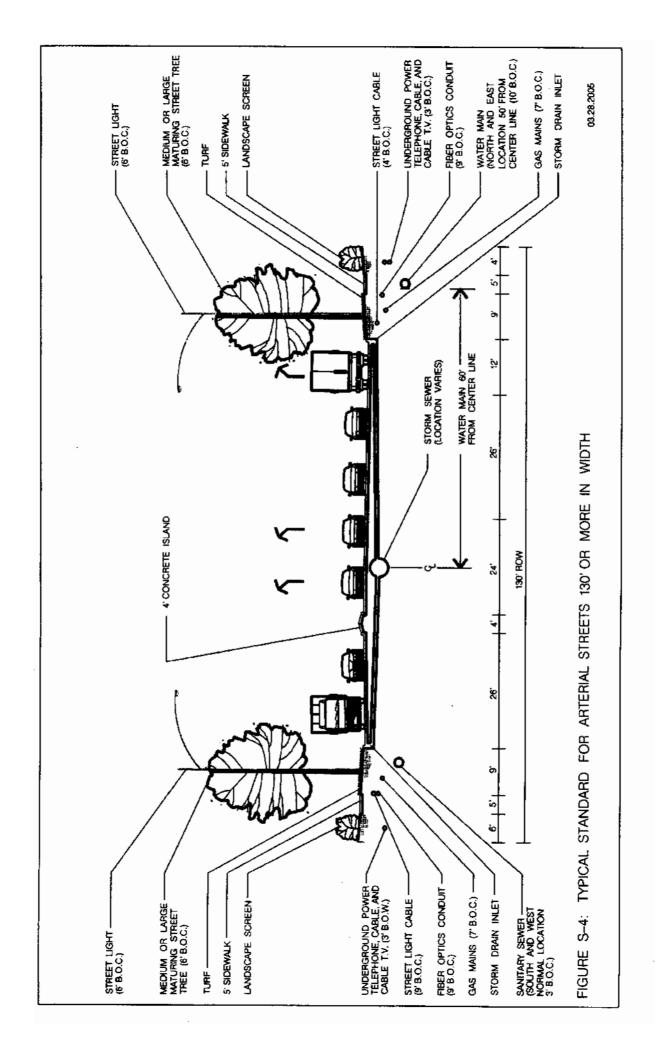
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Chapter 3.50 DESIGN STANDARDS FOR SCREENING AND LANDSCAPING

The Planning Department is assigned responsibility for administration of these design standards.

Section 1. OBJECTIVE

To achieve a desirable and a permanent landscape screen which will, with a minimum amount of maintenance, provide a buffer to minimize the visual effect of adjacent incompatible land uses, land uses substantially different, and similar land uses of different character, and to protect the health, safety and welfare of the general public.

Section 2. DEFINITION OF LANDSCAPE SCREEN

A visual buffer consisting of plant material, masonry, wood, other material approved by the Planning Director, and differences in land surface elevations or a combination of these elements. (Slats in a chain link fence shall not be acceptable.)

Section 3. GENERAL REQUIREMENTS

- 1. Where required by conditions of approval of a plat, special permit or use permit the developer shall submit to the City for review and approval, a detailed and accurately scaled plan clearly showing the location, height and design of the fence screen, earth berm or excavation and clearly showing the location and identifying the plant material in the plant material screen. A plant material list including the common name, botanical name, quantity, mature height and spread, size at planting and method of handling shall be shown on the plan.
- 2. Where screening is required by Title 27 between incompatible land uses, or around parking lots, the owner or builder of a structure or parking lot shall submit a landscape plan showing the location, height, and design of the fence screen, earth berm, or excavation and clearly showing the location and identifying the plant material in the plant material screen. A plant material list including the common name, botanical name, quantity, size, and method of handling shall be shown on the landscape plan. Such plan shall be submitted and approved prior to the issuance of a final building permit with a structure or parking lot; provided, however, limited construction as permitted by Section 106.4.1 of the Building Code, may proceed without submittal or approval of the landscape plan.
- 3. The opacity of the screen should be inversely proportional to the horizontal distance between the land uses and the property line to accomplish the above "objective."
- 4. Fences shall be installed during construction of the project or as soon as weather permits and shall be inspected and approved prior to permitting initial occupancy of the property. Plant material shall be installed within one year following completion of the development and initial occupancy of the property unless phase development is permitted or otherwise specified by the Planning Director.
- 5. Screens over thirty inches (30") in height shall not be installed in the triangular open space required for sight distance for vehicles entering and exiting the property.
- 6. Screens shall be maintained in a neat appearance and repaired of or replaced to the original

state

if damaged, destroyed, or in need of repair; masonry and wood fences shall be replaced within a period of thirty (30) days, or as soon as weather permits; plant material shall be replaced in the next appropriate planting season (spring or fall, depending on the particular plant material), in accordance with the approved landscape plan. If the screen is totally destroyed by an "Act of God", the replacement period may be extended with a written request approved by the Planning Director.

- 7. The landscape design and the selection of plant material shall:
- (a) Allow the sun to shine on habitable buildings and recreation areas, streets, roadways, parking lots, sidewalks and other traveled ways in winter for solar heat radiation to aid in melting of the snow and ice.
- (b) Provide shade on habitable buildings, recreation areas, streets, roadways, parking lots, sidewalks, and other traveled ways in summertime to reduce solar heat radiation to aid in the reduction of heat and glare.
- (c) Not increase the drifting of snow onto streets, roadways, parking lots, sidewalks and other traveled ways.
- 8. No screening is required if the distance between the lot line and the building is less than five (5) feet.
- 98. Concrete and metal fences may be used in the screening of salvage and scrap processing operations. Chain link fencing may be used for security or other purposes but is not acceptable screen material with or without slats.

Section 4. PLANT MATERIAL FOR SCREENING AND LANDSCAPING

- 1. (a) At least one-half (1/2), except three-quarters (3/4) for salvage yards and scrap processing operations of the screen shall be coniferous or a variety of plant material that will retain its leaves through the winter months, unless otherwise indicated elsewhere in this chapter. An exception would be allowed if in conflict with paragraph 7 of the general requirements. Where the number of deciduous plants is increased to provide a year-around screen the Planning Director may approve a reduction in the amount of coniferous plants or plants that retain their leaves in the winter. The branching characteristics of the plant will be considered when considering the reduction. This reduction cannot be approved for salvage yards and scrap processing operations. (b) The sole use of plants to screen salvage yards and scrap processing operations is not acceptable.
- 2. A list of acceptable plant material shall be available upon request in the Office of the Planning Department. This list will specifically list the size, method of handling, and design spread diameter for each variety of plant material. However, other plant material may be used and added to the list upon meeting the requirements in subparagraph 3 below and with the approval of the Planning Director. If anyone chooses to add a plant to the list, they should submit information such as its mature spread and height, rate of growth and other information as requested by the Planning Director for consideration.
- 3. The variety of plant material used shall be reasonably:
- (a) Free from litter and offensive odors;
- (b) Resistant to breakage by wind and winter storms;
- (c) Resistant to disease, insect attack and weather stresses;
- (d) Long lived;

- (e) Adaptable to City conditions;
- (f) Easily transplanted and grown.
- 4. The installation of the plant material shall conform to the approved landscape plan and the general requirements of the City of Lincoln Specifications for Street Trees. These specifications shall be on file at the Planning Department, Parks and Recreation Department, Department of Building and Safety, and City Clerk. The installation may be inspected by the City.
- 5. The land owner agrees to promote vigorous growth of the required plants by performing continuous and properly timed maintenance. The maintenance responsibility consists of watering, weeding, fertilizing, controlling diseases and insects, pruning, removing the stakes and wires used to secure the plant when planting and removing and replacing unhealthy, damaged and/or dead plants. The replacement plant must be the same species, size and in the same location as shown on the approved landscape plan and planted during the next appropriate planting season. Substitute plants may be permitted by submitting a request to the Director of Planning.

Section 5 FENCE SCREENS

- 1. Shall be installed to withstand wind pressures and in accordance with the acceptable practices and the installation shall be inspected by the City as provided in Section 3, "General Requirements," subparagraph 4.
- 2. Plant material may be combined along with the masonry or wood fence.
- 3. Fences do not need to be completely opaque.
- 4. The height of fences shall conform to Title 27 of the Lincoln Municipal Code.
- 5. Generally, fences should not slope with the ground, but should be built on level lines. (See attached sketch).
- 6. The color of the fences should be in the neutral range of colors.

Section 6. BERM AND EXCAVATION

- 1. The side slopes shall not exceed three to one (horizontal to vertical) without the use of retaining material.
- 2. The land surface shall be protected to prevent erosion. The means of protection shall be either (a) sodding, to be done as soon as weather permits; (b) seeding with grass if permitted, depending on erosion control measures and the steepness of the slope; or (c) planting with an approved permanent ground cover.
- 3. Retaining walls shall be constructed in accordance with acceptable engineering standards.

Section 7. HOW MUCH IS TO BE SCREEN AND WHERE THE SCREENS ARE TO BE LOCATED ON THE PROPERTY:

(See Attached Sketch)

If plant material is used for part of the screen, the design size and shape of the plant material shall be used in computing the opacity of the screen.

7.1 Parking Lots and, Parking Areas and Driving Aisles

It is the intention of the screening standards for parking lots and parking areas to provide an adequate, aesthetic visual screen of the facility while not seriously impairing observation of the lot from public ways for the sake of security.

- (a) General: The screen shall be located adjacent to the barrier surrounding the parking lot or parking area but far enough from the barrier so as to be protected from the bumpers of other vehicles.
- (b) For parking lots which are set back from the lot line, the screening requirements may be reduced in increments of ten percent (10%) of total screen for each ten feet (10) of turf between the property line and the parking lot line.
- (c) <u>Driveway throats/driveway curb cuts</u> Entrance Driveways shall be excluded from the required screen.
- (d) The screen shall be evenly distributed horizontally and may vary in height.
- (e) The design spread of deciduous trees may be used for one half (1/2) of the deciduous plant portion of the required screen.
- (f) The side of the parking lot adjacent to a public street shall be screened at least sixty ninety percent (690%) from two feet (2') to four feet (4') above the surface of the lot. Fences may not be used to meet this screening requirement. When there is less than five feet
- (5') between the parking lot and the street, one (1) deciduous tree shall be required for parking lots less than five thousand (5,000) square feet and one (1) additional tree for each additional five thousand (5,000) square feet of parking or fraction of five thousand (5,000) square feet:
- (g) All other sides of the parking lot shall be screened at least ninety percent (90%) from two feet (2') to four feet (4') above the surface of the lot.
- (h) If plant material is used, the density percentage is calculated at plant maturity.

7.2. Mobile Home Courts and Mobile Home Subdivisions Approved by Special Permit The screen shall be evenly distributed horizontally; however, it may vary in height as to screen at least sixty percent (60%) of the surface from the ground to a height of ten feet (10') above the adjacent ground elevation of the mobile home court and mobile home subdivision. This screen is required along each side of the mobile home court and mobile home subdivision and shall be located within the fifty foot (50') exterior open space or between the mobile homes and the exterior boundary. Entrance roadways and the required open space for sight distance associated with intersections shall be excluded from the required screen.

7.3 Community Unit Plans and Other Multiple Family Dwellings Approved by Special Permit, and Planned Unit Development and Use Permit.

The screen shall be evenly distributed horizontally: It may vary in height so as to screen at least fifty percent (50%) of the surface area of a vertical plane extending along the property line from six feet to fifteen feet (6' to 15') above the adjacent ground elevation of multiple dwelling structures, garages, maintenance buildings, etc. This screen shall be located between the structures and the adjacent property line.

7.4 Residential Lots Backing Onto Public Arterial Streets and Railroads

The screen shall be evenly distributed horizontally; however, it may vary in height so as to screen at least fifty percent (50%) (60%) of the surface area of a vertical plane extending along the entire length of the street or railroads abutting the lots and from the ground elevation at the lot line to six ten feet (6') (10') above the surface elevation of the street or railroad. This screen shall usually be located on private property rather than in the street right of way and along the lot line. Open space for sight distance associated with street intersections shall be excluded from the

required screen. Fences may not count for more than 50% of the screening requirement for residential lots backing onto arterial streets.

7.5 Adjacent Land Uses and Zoning Districts of Substantially Different Character; B-1, B-2, B-3, H-2, H-3, H-4, B-5, O-2, I-1, I-2, Abutting Residential Districts

The screen shall be evenly distributed horizontally, however, it may vary in height so as to screen at least sixty percent (60%) of the surface area of a vertical plane extending along the entire length of the property line and from the ground elevation to a height of ten feet (10') above the adjacent ground elevation. This screen shall generally be located adjacent to the property line abutting the different uses.

7.6 Required Yards, Open Space Areas, Malls and Around Proposed Buildings in the O-3, B-2, B-5, I-2 and I-3 Districts and Churches in R-1 through R-4 Residential Districts

There shall be provided for each 10,000 square feet or fraction thereof of building coverage, four (4) trees with a design spread diameter of thirty (30') feet each or combination of trees to equal the same, and four hundred (400) square feet of shrub coverage.

7.7 Salvage and Scrap Processing Operations Approved by Special Permit or Permitted as Conditional Use

The area outside a building used for the storage of salvage material in connection with the operation of a salvage or scrap processing operation shall be screened. In addition, the area outside a building used for the storage of vehicles waiting repair in connection with the operation of a vehicle body repair shop shall be screened. The screen shall be evenly distributed horizontally. It may vary in height and openness so as to screen at least 90 percent (90%) of the surface area of a vertical plane from the ground elevation to a height of six feet (6') above the ground elevation. The screen shall be installed along the entire perimeter of the area of the salvage or scrap processing operation where salvage material or vehicles waiting repair are held outside of a building, except where such area abuts the outside storage area of another salvage or scrap processing operation screened in accordance with a landscape screen approved by the City. If such screening is ineffective because of topography of premise or surrounding area or the presence of a public street viaduct, the ninety percent (90%) screen shall be extended to the height necessary to obstruct the view of the salvage material or vehicles waiting repair. The screen below a height of six feet (6') shall be accomplished by fences or differences in land surface elevations. At least three-quarters (3/4) of the screen shall be coniferous or a variety of plant material that will retain its leaves through the winter months. The sole use of plants to screen salvage yards and scrap processing operations is not acceptable.

7.8 Day Care Centers and Preschools Approved by Special Permit

The screen shall be evenly distributed horizontally; however, it may vary in height so as to screen at least 90 percent (90%)of the surface area of a vertical plane from the ground elevation to six feet (6') in height. The screen shall be installed along the periphery of the outdoor play area.

7.9 Broadcast Towers

Broadcast towers except those mounted on the top of existing structures:

Deciduous and coniferous evergreen trees shall be planted around the tower to screen the tower

from adjacent properties, of 70 percent (70%) from the ground to eight (8) feet. Fifty percent (50%) or more of the trees should grow to a mature height of thirty-five feet (35') or more.

7.10 R.T. District Screening

The screen shall be evenly distributed horizontally; however, it may vary in height so as to screen at least sixty percent (60%) of the surface area of a vertical plane extending alone the entire length of each side and rear lot line adjacent to a residential district from the ground to a height of ten feet (10') above the adjacent ground elevation. Fences may not be used to meet more than fifty percent (50%) of this screening requirement.

7.11 Refuse Areas, Dumpsters, Waste Removal Areas, Service Yards, Storage Yards, Recycling Areas, Exterior Work Areas and Ground Level Mechanical Areas

The screen shall be evenly distributed horizontally; however, it may vary in height so as to screen at least sixty percent (60%) of the surface area of a vertical plane extending alone the entire length of each side and rear lot line adjacent to a residential district from the ground to a height of ten feet (10') above the adjacent ground elevation. Fences may not be used to meet more than fifty percent (50%) of this screening requirement.

Section 8. PROCEDURES

All plans and documents required to be submitted by the developer hereunder shall be filed with the Building Official. Three (3) copies of each of a detailed and accurately scaled layout showing the resolutions shall be submitted for review and approval by the Planning Director. The Building Official shall serve as the coordinating agency for the reviews and approvals required by the various departments hereunder. Adjustments to these standards may be made by the Director of Planning on an individual basis with written agreement from adjacent property owners accompanying the proposed screen. Before the City issues the Certificate of Occupancy, the owner(s) shall sign an agreement to continuously maintain the required landscape screen and landscaping by performing the maintenance responsibilities described in Section 4, subparagraph (5) of these standards.

Chapter 3.45 DESIGN STANDARDS FOR PARKING LOTS

The Department of Public Works and Utilities is assigned responsibility for administration of these design standards.

Section 1. GENERAL

This standard shall apply to all parking lots located within the zoning jurisdiction of the City of Lincoln. Title 28, Code of Federal Regulations, Part 36 (ADA Accessibility Guidelines), Title 156, Nebraska Administrative Code - Nebraska Accessibility Requirements; and the City of Lincoln, Nebraska Design Standards for Screening and Landscaping, Drainage Criteria Manual and Design Standards for Driveway Design and Location, generally apply to the design of parking lots in the City of Lincoln.

ection 2. POLICIES

2.1 Reviewing Agencies

All plans for the construction of parking lots shall be reviewed and approved by the Department of Public Works, screening and landscape design shall be reviewed and approved by the Lincoln City-Lancaster County Planning Department and the lighting design, if required, shall be reviewed and approved by the Lincoln Electric System.

Section 3. DESIGN

3.1 Layout

The size, location and orientation of the parking spaces and aisles shall conform to the details shown in Figure PL-1. Barriers and islands should generally conform to the details shown on Figure PL-2. Required accessible parking spaces, including van-accessible spaces, shall be located, designed, marked and signed in conformance with the requirements of Title 28, Code of Federal Regulations, Part 36 (ADA Accessibility Guidelines) and Title 156, Nebraska Administrative Code - Nebraska Accessibility Requirements. Upon completion of construction of the parking lot, the required parking spaces shall be marked on the parking lot surface with paint formulated for that purpose and in accordance with the approved layout. Parking spaces provided in excess of the number required under Title 27, Lincoln Municipal Code or as required by conditions of a special permit need not be marked, or they may be marked to lesser standards.

3.2 Driveway Approaches

Driveway approaches shall conform to the requirements of the Design Standards for Driveway Design and Location.

3.3 Parking Barriers

Parking barriers must be provided around parking lots to prevent the parked vehicles from overhanging the required yards where parking is prohibited, sidewalk space, public streets, public alleys, or other public or private property and to protect any required landscaping or landscape screen planting. Approved barriers include the following types:

- 1. Poured concrete curb nominal 6" x 6" (152 x 152 mm) exposed.
- 2. Fence minimum 30" (762 mm) height wire fabric, solid wood, post and rail, etc.
- 3. Masonry, modular segmental block or concrete wall minimum 30" (762 mm) height.

- 4. Beam guardrail.
- 5. Post and cable guardrail.
- 6. Precast concrete wheel stop, firmly and permanently anchored.

Other barriers which fulfill the required function may be permitted, subject to approval by the Public Works and Utilities Department. Barriers must be located to contain the parking within the approved parking lot. When a concrete curb or precast wheel stop is used as a barrier for perpendicular or angle parking, it must be offset at least 2 feet (0.6 m) from the edge of the parking lot to allow for the front overhang of the vehicle.

3.4 Drainage

Parking lots shall be designed to properly manage the surface drainage accumulating on and flowing onto the site. For new parking lots containing 6,000 square feet (557 square meters) or more and which are located within 150 feet (45.7 m) of, or reasonably accessible to, an existing storm sewer or other drainageway, including open channels and creeks, but excluding roadway gutters, the parking lot must be graded and surfaced such that storm water runoff from the site is not allowed to discharge through the driveway approaches onto the public street or other property, but is collected on the site by an internal drainage system located on the site and carried to that existing storm sewer. Use of parking lot surfaces and surrounding landscaped areas to provide storm water detention is encouraged. Parking lot drainage facilities and appurtenances shall be designed and constructed in conformance with the requirements of the *Drainage Criteria Manual* of the City of Lincoln, Nebraska.

3.5 Surfacing

All parking lots other than nonpermanent lots that are allowed for a maximum period of two years shall be surfaced with one of the following minimum cross sections:

- 1. Portland cement concrete pavement, 5 inches (125 mm) thick.
- 2. Asphaltic concrete pavement, 6 inches (155 mm) thick.
- 3. 3-inch (75 mm) asphaltic concrete surface on a 4-inch (100 mm) crushed rock or recycled concrete base course.
- 4. Modular pavers, open landscape paving blocks, pervious asphalt surfaces with subdrains or other permanent surfacing approved by the Public Works and Utilities Department. It should be noted that the above surfacing sections are intended only to serve as minimum standards for primary use by automobile traffic. In parking lots and drive areas where moderate to heavy truck traffic is anticipated, the structural capacity of the surfacing should be analyzed and the pavement structure designed accordingly. Such instances may require thicker or reinforced sections and special subgrade treatments. Nonpermanent parking lots may be graveled as approved by the City, and shall be maintained in a dust-free condition during the two-year period they are permitted.

3.6 Landscaping

For all parking lots which exceed 10,000 6,000 square feet (929 square meters) in paved area, there shall be planted within that paved area one shade tree for each 10,000 6,000 square feet (929 square meters) of parking lot paving or portion in excess thereof. The unpaved planting area around each tree shall be not less than 36 50 square feet (3.3 square meters) and shall be constructed in such a manner as to prevent intrusion of vehicles into said planting area. Such landscaping shall be in conformance with Section 14.44.010, Lincoln Municipal Code and the Design Standards for Screening and Landscaping. These standards may be modified by the Planning Director.

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Chapter 3.45 DESIGN STANDARDS FOR PARKING LOTS

The Department of Public Works and Utilities is assigned responsibility for administration of these design standards.

Section 1. GENERAL

This standard shall apply to all parking lots located within the zoning jurisdiction of the City of Lincoln. Title 28, Code of Federal Regulations, Part 36 (ADA Accessibility Guidelines), Title 156, Nebraska Administrative Code - Nebraska Accessibility Requirements; and the City of Lincoln, Nebraska Design Standards for Screening and Landscaping, Drainage Criteria Manual and Design Standards for Driveway Design and Location, generally apply to the design of parking lots in the City of Lincoln.

ection 2. POLICIES

2.1 Reviewing Agencies

All plans for the construction of parking lots shall be reviewed and approved by the Department of Public Works, screening and landscape design shall be reviewed and approved by the Lincoln City-Lancaster County Planning Department and the lighting design, if required, shall be reviewed and approved by the Lincoln Electric System.

Section 3. DESIGN

3.1 Layout

The size, location and orientation of the parking spaces and aisles shall conform to the details shown in Figure PL-1. Barriers and islands should generally conform to the details shown on Figure PL-2. Required accessible parking spaces, including van-accessible spaces, shall be located, designed, marked and signed in conformance with the requirements of Title 28, Code of Federal Regulations, Part 36 (ADA Accessibility Guidelines) and Title 156, Nebraska Administrative Code - Nebraska Accessibility Requirements. Upon completion of construction of the parking lot, the required parking spaces shall be marked on the parking lot surface with paint formulated for that purpose and in accordance with the approved layout. Parking spaces provided in excess of the number required under Title 27, Lincoln Municipal Code or as required by conditions of a special permit need not be marked, or they may be marked to lesser standards.

3.2 Driveway Approaches

Driveway approaches shall conform to the requirements of the Design Standards for Driveway Design and Location.

3.3 Parking Barriers

Parking barriers must be provided around parking lots to prevent the parked vehicles from overhanging the required yards where parking is prohibited, sidewalk space, public streets, public alleys, or other public or private property and to protect any required landscaping or landscape screen planting. Approved barriers include the following types:

- 1. Poured concrete curb nominal 6" x 6" (152 x 152 mm) exposed.
- 2. Fence minimum 30" (762 mm) height wire fabric, solid wood, post and rail, etc.
- 3. Masonry, modular segmental block or concrete wall minimum 30" (762 mm) height.

- 4. Beam guardrail.
- 5. Post and cable guardrail.
- 6. Precast concrete wheel stop, firmly and permanently anchored.

Other barriers which fulfill the required function may be permitted, subject to approval by the Public Works and Utilities Department. Barriers must be located to contain the parking within the approved parking lot. When a concrete curb or precast wheel stop is used as a barrier for perpendicular or angle parking, it must be offset at least 2 feet (0.6 m) from the edge of the parking lot to allow for the front overhang of the vehicle.

3.4 Drainage

Parking lots shall be designed to properly manage the surface drainage accumulating on and flowing onto the site. For new parking lots containing 6,000 square feet (557 square meters) or more and which are located within 150 feet (45.7 m) of, or reasonably accessible to, an existing storm sewer or other drainageway, including open channels and creeks, but excluding roadway gutters, the parking lot must be graded and surfaced such that storm water runoff from the site is not allowed to discharge through the driveway approaches onto the public street or other property, but is collected on the site by an internal drainage system located on the site and carried to that existing storm sewer. Use of parking lot surfaces and surrounding landscaped areas to provide storm water detention is encouraged. Parking lot drainage facilities and appurtenances shall be designed and constructed in conformance with the requirements of the *Drainage Criteria Manual* of the City of Lincoln, Nebraska.

3.5 Surfacing

All parking lots other than nonpermanent lots that are allowed for a maximum period of two years shall be surfaced with one of the following minimum cross sections:

- 1. Portland cement concrete pavement, 5 inches (125 mm) thick.
- 2. Asphaltic concrete pavement, 6 inches (155 mm) thick.
- 3. 3-inch (75 mm) asphaltic concrete surface on a 4-inch (100 mm) crushed rock or recycled concrete base course.
- 4. Modular pavers, open landscape paving blocks, pervious asphalt surfaces with subdrains or other permanent surfacing approved by the Public Works and Utilities Department. It should be noted that the above surfacing sections are intended only to serve as minimum standards for primary use by automobile traffic. In parking lots and drive areas where moderate to heavy truck traffic is anticipated, the structural capacity of the surfacing should be analyzed and the pavement structure designed accordingly. Such instances may require thicker or reinforced sections and special subgrade treatments. Nonpermanent parking lots may be graveled as approved by the City, and shall be maintained in a dust-free condition during the two-year period they are permitted.

3.6 Landscaping

For all parking lots which exceed 10,000 6,000 square feet (929 square meters) in paved area, there shall be planted within that paved area one shade tree for each 10,000 6,000 square feet (929 square meters) of parking lot paving or portion in excess thereof. The unpaved planting area around each tree shall be not less than 36 50 square feet (3.3 square meters) and shall be constructed in such a manner as to prevent intrusion of vehicles into said planting area. Such landscaping shall be in conformance with Section 14.44.010, Lincoln Municipal Code and the Design Standards for Screening and Landscaping.

Chapter:

DESIGN STANDARDS FOR LANDSCAPING STREETSCAPES, MEDIANS, BOULEVARDS, ROUNDABOUTS AND ARTERIAL STREETS

The Departments of Public Works and Parks and Recreation are assigned the responsibility of administration of these design standards.

Section 1. GENERAL

(A) Intent

The Design Standards for Landscaping Streetscapes, Medians, Boulevards, Roundabouts and Major streets are intended to promote suitable site preparation and plant material selection, to improve public safety by minimizing sight distance and facility obstructions, to indicate where design elements may or may not warrant additional plant material installation or maintenance costs, and to create an aesthetic community image through continuity.

(B) Scope

These Design Standards apply to streetscapes where specified and include the design, selection, site preparation, planting and maintenance of suitable landscaping plant materials within or upon designated medians, cul-de-sac circles, boulevards, roundabouts or arterial streets in the public right-of-way. The requirements of this chapter are in addition to and compliment those set forth in the "Design Standards for Street Trees" and the "Design Standards for Screening and Landscaping" in Titles 2 and 3 of the City of Lincoln Design Standards.

(C) Concept

The "basic" landscape design concept is a corridor framed by medium or large street trees with low-growing, drought-tolerant turf interspersed with groupings of small, medium and/or large trees in the center median. Site and soil conditions, the desired character of the landscaping and installation and maintenance costs should guide the selection of turf and tree species for this prototypical design. A concrete apron (i.e. "mow strip") 2' in width/5" thick with a minimum slope of 0.6" per foot draining to the curb, is required around all medians, cul-de-sac circles, boulevards, and roundabouts, for both the "basic" and "enhanced" design concepts.

The "enhanced" landscape design concept includes more intensive landscaping of corridors or portions there of, beyond the "basic" prototypical design of trees and drought-tolerant, low growing turf that requires minimal mowing. Additional groupings of ornamental grasses, shrubs, trees and/or perennial flowers in the center median would be components of an "enhanced" landscape design. The design, installation and maintenance of "enhanced" landscaped corridors would be implemented through a cooperative effort between a developer, neighborhood

association and/or business organization and the City. Those desiring an "enhanced" landscape would be required to contribute financially by funding both installation and maintenance costs for installation and maintenance beyond those associated with the prototypical "basic" landscape design.

(D) Reference Standards and Ordinances

Where not specified in these Standards, the Director of Public Works and the Director of Parks and Recreation will specify City of Lincoln Design Standards, Lincoln Municipal Code, City of Lincoln Sight Distance Standards for Traffic Safety and City of Lincoln Standard Specifications for Municipal Construction to be applied to the requirements, design, construction and landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets within the City of Lincoln public right-of-way.

(E) City Approval Required

All work associated with the design, construction, and landscaping of streetscapes, medians, culde-sac circles, boulevards, roundabouts and arterial streets within or upon any City of Lincoln public right-of-way is subject to City of Lincoln approval as set forth in the City of Lincoln Municipal Code, City of Lincoln Design Standards, and City of Lincoln Standard Specifications for Municipal Construction. See Chapter 2.15, Design Standards for Urban and Public Streets; Chapter 2.35, Design Standards for Street Trees; and Chapter 3.50, Design Standards for Screening and Landscaping.

Section 2. LANDSCAPING PLAN

(A) Landscaping Plan Required

An applicant for development, redevelopment, zoning, rezoning, special use permit or construction approval involving a project or development where the landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and/or arterial streets are required or where prescribed by a City-adopted Community Unit Plan, Planned Unit Development, or special use permit, shall submit a Landscaping Plan for review and approval in compliance with these Standards and other applicable City of Lincoln Design Standards for Land Subdivision Regulations, Zoning Regulations and Titles 12, 14, 26 and 27 of the Lincoln Municipal Code. Any construction activities or enhancements done by the City of Lincoln involving the landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and/or arterial streets shall also be required to have a Landscaping Plan which shall be reviewed and approved by appropriate City departments in compliance with these Standards and other applicable City of

Lincoln Design Standards, Lincoln Municipal Code and Standard Specifications for Municipal Construction.

(B) Landscaping Plan Requirements

The Landscaping Plan shall be prepared by a certified Landscape Architect or qualified and experienced Landscape Designer and shall include the following elements:

- (1) Location, type and size of all existing trees and landscaping materials proposed to remain and the construction activity controls, measures, provisions and restrictions recommended to ensure their proper protection.
- (2) Design location, type, number and size of all plant materials proposed to be planted, relocated or removed.
- (3) Botanical and common name/including cultivar of all plant materials listed on plan.
- (4) Location of existing and proposed utilities, streets, medians, cul-de-sac circles, boulevards, roundabouts and public right-of-way boundaries and easements.
- (5) Design specifications and notes for proposed landscaping plant materials, including without limitation, approved plant variety types, number and size of plants to be installed, type of planting stock (i.e. container, balled & burlap, sod, seed, plugs, etc.), location, and installation details illustrating proper planting, mulching, staking, establishment and maintenance techniques.
- (6) Topsoil specifications/qualities for backfill materials and backfill/finish grading specifications in areas to be landscaped.
- (7) Applicable Standard Principal Arterials (i.e. 120', 126', 130', or 136' wide corridor) for designated corridors to be landscaped. See Chapter 2.15, Design Standards for Urban Public Streets.

Section 3. SITE PREPARATION

(A) Description

Site preparation includes, without limitation, layout, existing tree and plant materials protection, demolition, clearing, excavation, fill and backfill, top soiling, and finished grading of areas to be landscaped.

(B) Materials

Imported fill for areas of constructed streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and arterial streets to be landscaped shall be clean, fertile, friable, silty clay loam topsoil that is free from turf, lime, ashes, debris, noxious weeds, plants or roots, stones over 1" in their largest dimension, lumps, clods, salts, soil sterilants or other materials that are detrimental to plant growth. Topsoil shall not be delivered or used while wet, frozen or in a muddy condition. Topsoil shall have an acidity range of pH 6.0 to 7.5 and contain not less than 3 to 5 percent organic matter. Topsoil shall be of a quality to support the growth of landscape plant materials.

(C) Excavation

Excavation of existing topsoil shall only be done if specifically required on the approved construction plans to a depth specified in the plans and stockpiled onsite or removed as indicated by the Project Inspector for the City. Excavated topsoil from onsite or that which is required to be hauled in must meet the materials specifications of this Standard for backfill used for constructed streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and arterial streets that are to be landscaped.

(D) Fill and Backfill Operations

The contractor shall be responsible for obtaining the Project Inspector's approval of the subgrade and finish grade before commencing soil preparation, top soiling, and finish grading or other subsequent operations. The following grading tolerances shall be applied:

- (1) Tolerances shall not exceed 0.1 feet above or below desired subgrade deviation in areas to be landscaped and no tolerance will be allowed on subgrades prepared for paving or site improvements, or subgrades immediately adjacent to curbs, medians, boulevards and/or roundabout pavements.
- (2) Settling of finish grade shall not exceed 0.1 feet.

The contractor shall complete all designated clearing operations before beginning any filling or backfilling.

If sufficient suitable fill or backfill material is not available on the project site, additional topsoil materials shall be furnished and installed in the quantities required and specified in these Standards for backfill used in landscaping constructed streetscape, medians, cul-de-sac circles, boulevards, roundabouts and arterial streets.

Placing fill and backfill in layers not to exceed 6 inches in compacted depth with the following compaction standards:

(1) Each layer shall be compacted to the specified density. Landscaping fill and

backfill shall be compacted to no less than 80 percent and no more than 85 percent density in areas to be planted.

(2) Compaction shall not occur when soil is wet.

Contractor shall ensure that filling and backfilling shall provide adequate site drainage at all times. Fill or backfill shall not be placed on wet sub soil.

(E) Finish Grading

Finish grading shall consist of cutting, filling, shaping and fine grading work to be done according to the exact lines and elevations indicated on the approved landscaping plans and/or as directed by the Project Engineer/Inspection for the City.

The contractor is responsible for the following:

- (1) Completing all finish grading onsite. The top of the subgrade shall be the depth below the finished grade as required for pavements, walks, seeding, plugging, sodding, landscaping, mulches and other site improvements.
- (2) Protecting the finish grade areas and regrading to correct any irregularities caused by hauling materials or by other operations over the finished grade.
- (3) Repairing any soil erosion or other damage resulting from weathering action before final acceptance.
- (4) Finish and fine grade the project area to establish an even and well matched grade over the entire surface. Positive surface drainage shall be assured and there shall be no depressions, subsequent settling or irregularities in the finished grade.

Excavated and filled sections and adjacent transition areas shall be smooth, properly compacted and free from irregular surface changes, all lumps of soil shall be pulverized, raked out or removed. The degree of finish grading shall be that ordinarily obtained from either blade, grader, or scraper operations. Where finishing cannot be satisfactorily completed with power equipment, hand raked methods shall be used.

Unless otherwise indicated, the subgrade shall be evenly sloped to provide drainage away from site improvements or the centerline of medians. Swales shall be cut as shown on the plans, but shall not reduce the thickness of the topsoil specified.

Finish grading shall conform to the grade elevations shown on an approved landscaping plan and the area shall be in a smooth, even condition, free from debris and other materials that would be detrimental to the finished grade. Settling of any finish grade shall not be more than 0.1 feet, and

if settling is greater, the contractor shall bring the grade to specified elevations.

Section 4. PLANT SELECTION AND PLACEMENT

(A) Plant Materials

- (1) Specific plant materials designated on the landscape plan to be planted in the public right-of-way shall be selected from the **Approved Lists** contained within these standards, unless an alternate plant selection has been approved by the City.
- (2) Plant selection and placement shall be designed and based upon the expected mature height and spread of the selected species, to prevent unnecessary competition or overcrowding of plants and to ensure that the selected plants remain within the median strip, cul-de-sac circles, planting strip, public easement, and/or roundabout width when mature without requiring excessive or frequent pruning.
- Obstructions and be in conformance with the City of Lincoln's Traffic Safety Sight Distance Standards where applicable and practical. Plantings for medians, cul-desac circles, arterial streets, and roundabouts must be designed to allow for visual access between vehicles and pedestrians in the vicinity of intersections and street access drives. Thus, a clear zone between 24 inches and 6 feet above the elevation of the roadway is required for clear lines of sight at intersections, left turn lanes, center medians, and street access drives. In addition, it is recommended that sufficient space be left between individual trees and/or clumps of trees as "windows" for motorists to monitor the locations of vehicles in other traffic lanes. Spacing of street trees planted between the curb and sidewalk/trail along arterial streets should be done according to the posted speed limit as noted in the city of Lincoln Sight Distance Standards for Traffic Safety.
- (4) Plant selection and placement shall be designed to avoid conflict with street lights, traffic lights, traffic signs, fire hydrants, crosswalks, intersections, sidewalks, bicycle/pedestrian trails, overhead utility wires, utility easements, and take into consideration the depth and location of underground utilities.
- (5) Street trees and/or center median trees shall not be planted any closer than 6 feet from back of curbs and no closer than 4 feet from sidewalks/trails; no closer than 15 feet from street lights, utility poles or traffic signal poles; no closer than 10 feet from fire hydrants; no closer than 15 feet from street access drives/alleys; no closer than 25 feet from the property corner adjacent to the street right-of-way intersection; no medium and/or large maturing tree types beneath overhead electrical wires.

- areas/parking lots along arterial streets would be for spaces five feet or wider between the parking lot and the private property lot line within the front yard setback. The expected mature height and spread of plant materials used for such landscape screens should remain within the width of the existing space between the parking lot and the private property line within the front yard setback without requiring excessive or frequent pruning. Such plantings shall not encroach onto any public sidewalk or bicycle/pedestrian trail and shall conform to the City of Lincoln's Sight Distance Standards for Traffic Safety for driveways or alleys adjacent to such areas.
- (7) Plant selection and placement of landscaping in the six (6) feet of green space located between the sidewalk and/or bicycle/pedestrian trail and the **right-of-way** line along arterial streets (i.e. 126 feet wide public way corridor) will be extremely restrictive due to space limitations and the location of the adjacent sidewalk and trail. Plant materials should not encroach upon sidewalks and/or trails when fully mature and should not be planted any closer than four (4) feet from the sidewalk and/or trail. If trees are planted between sidewalks/trails and the right-of-way line, they need to be an approved species that can eventually be pruned to a clearance of ten (10) feet above the sidewalk/trail if their lateral branching will or does extend into and/or over them.

Section 5. PLANTING

(A) Description

Planting includes, without limitation, the placement of specified plant materials, seed, sod and/or plugs, as shown on the approved landscape plan, the placement of materials to protect and enhance plant growth, and the methods applied in planting and maintaining landscape plants.

(B) Specifications

Specified sizes and types (i.e. container, balled & burlapped, etc.) of plant materials (i.e. nursery grown trees, shrubs, ornamental grasses, perennials, wildflower seed mixtures, turf-type seed, sod or plugs, etc.) shall be determined by the City prior to the design of landscaping plans. City of Lincoln Standard Specifications for Landscape Work and Seeding and sodding shall be used where applicable in the installation and maintenance of landscaping done on the City right-of-way.

Section 6. APPROVED STREET TREE LIST FOR NON-PAVED PLANTING STRIPS, MEDIANS, CUL-DE-SAC CIRCLES, BOULEVARDS, ROUNDABOUTS AND MAJOR STREETS

Trees listed will do well provided the appropriate species is selected for a particular site and proper care is given (see Section 7. "Tree Characteristics"). The trees on this list offer a wide range of varieties and cultivars. Tree names are followed by acceptable tree varieties that may be used in streetscapes with restrictions footnoted. Other available varieties or cultivars of the tree types listed may be used, subject to City approval. Trees are listed in alphabetical order and are not prioritized according to their suggested use.

Small Maturing Trees (Under 25' Mature Height)	Medium Maturing Trees (30'-40' Mature Height)	Large Maturing Trees (Over 45' Mature Height)
Required Planting Strip Width 4' - 5' Minimum	Required Planting Strip Width 6'-8' Minimum	Required Planting Strip Width 8' Minimum
Spacing Between Trees 20' Minimum, 25' Recommended	Spacing Between Trees 30' Minimum, 35' Recommended	Spacing Between Trees 40' Minimum, 45' Recommended
Ash - Fraxinus pennsylvanica 'Leprechaun'	Goldenraintree - Koelreuteria paniculata	Ash - Fraxinus pennsylvanica ('Cimmaron', 'Marshall's Seedless' 'Patmore')
Crabapple - Malus spp. Disease resistant varieties, 'Donald Wyman', 'Centurion', 'Harvest Gold', 'Indian Summer', 'Prairifire', 'Professor Sprenger', Robinson', 'Sugar Tyme'	Honey locust - Gleditsia triacanthos var. inermis ('Imperial')	Ash - Fraxinus americana ('Autumn Purple')
Lilac, Japanese Tree - Syringa reticulata ('Ivory Silk' - tree form)	Linden, Little-leaf -Tilia cordata ('Greenspire')	Bald Cypress* - Taxoduim distichum
Maple, Amur - Acer ginnala ('Flame' - tree form)	Maple, Black - (Acer nigrum) 'Greencolumn'	Coffeetree, Kentucky -Gyminocladus dioicus
Maple, Tatarian - Acer tatarium - tree form	Pear - Pyrus calleryana ('Aristocrat', 'Chanticleer', 'Capital, 'Redspire')	Elm, American - Ulmus americana ('Homestead', 'Pioneer')
Redbud - Cercis canadensis - tree form		Ginkgo - Ginkgo biloba ('Autumn Gold', 'Princeton Sentry', 'Saratoga')
Serviceberry - Amelanchier spp. ('Autumn Brilliance', 'Cole Select' - tree form)		Hackberry, Common - Celtis occidentalis
		Honeyloucst - Gledistia triacanthos var. inermis ('Skyline')
		Maple, Norway - Acer platanoides ('Emerald Lustre' or 'Emerald Queen')
		Maple, Red - Acer rubrum ('Red Sunset')
		Oak, Bur - Quercus macrocarpa

		Oak, Swamp White - Quercus bicolor
		Pine, Limber * - Pinus flexilis ('Vanderwolf's Pyramid')
		Spruce, Black Hills*- Picea glauca densata
Small Maturing Trees (Under 25' Mature Height)	Medium Maturing Trees (30'-40' Mature Height)	Large Maturing Trees (Over 45' Mature Height)
Required Planting Strip Width 4' - 5' Minimum	Required Planting Strip Width 6'-8' Minimum	Required Planting Strip Width 8' Minimum
Spacing Between Trees 20' Minimum, 25' Recommended	Spacing Between Trees 30' Minimum, 35' Recommended	Spacing Between Trees 40' Minimum, 45' Recommended
	···	Spruce, Colorado* - Picea pungeus
	-	Spruce, Serbian* - Picea omorika

^{*}Coniferous trees are not allowed between the curb and sidewalk, curb and bicycle/pedestrian trail, or certain other locations within the City right-of-way of residential or major streets due to traffic sight clearance requirements.

Section 7. TREE CHARACTERISTICS

The following table describes the typical characteristics of specific deciduous and coniferous* trees (see restrictions footnote) on the Approved Street Tree List for Lincoln when planted in non-paved planting strips, medians, boulevards, roundabouts, and majorl streets located within and/or adjacent to the public right-of-way of city streets. Trees growing in paved areas will typically have an overall mature height of approximately 1/3 less then that of trees in non-paved areas.

Small Maturing Trees (Under 25' Mature Height)

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Ash Fraxinus pennsylvenica ('Leprechaun')	18' ht., 16' spread, round	Genetic dwarf form of Green Ash. Small to medium green leaves turn yellow in fall. Dense canopy matures to a compact, rounded shape.
Crabapple Malus ('Centurion')	20'-25' ht., 15' spread, upright oval	Adaptable water requirements once established, red buds open to <u>rose red flowers</u> , tolerates acid, alkaline, wet & dry soils, requires full sun, good to excellent disease resistant
Crabapple Malus ('Donald Wyman')	20' ht., 20' spread, broad globe	Adaptable water requirements once established, red to pink buds open to white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good disease resistance

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Crabapple Malus ('Harvest Gold')	20' ht., 15' spread, upright to vase-shaped	Adaptable water requirements once established, red to pink buds open to white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good disease resistant.
Crabapple Malus ('Indian Summer')	18' ht., 20' spread, rounded	Adaptable water requirements once established, red buds open to <u>rose red</u> to deep pink flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good to excellent disease resistance
Crabapple Malus ('Prairifire')	20' ht., 15' spread, moderate upright to rounded	Adaptable water requirements once established, red buds open to <u>purplish red</u> flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, excellent disease resistant
COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Crabapple Malus ('Professor Sprenger')	20' ht., 20' spread, upright spreading	Adaptable water requirements once established, red to pink buds open to white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, excellent disease resistant
Crabapple Malus ('Robinson')	25' ht., 25' spread, upright spreading to rounded	Adaptable water requirements once established, crimson buds open to deep pink flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good to excellent disease resistant
Crabapple Malus ('Sugar Tyme')	18' ht., 15' spread, upright oval	Adaptable water requirements once established, pale pink buds open to sugar white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, fair to good disease resistance
Lilac, Japanese Tree Syringa reticulata ('Ivory Silk')	20' ht., 15' spread, moderate globe, plant tree form only	Adaptable water requirements once established, attractive white flowers in June, requires full sun, tolerant of road salt spray
Maple, Amur Acer ginnala ('Flame')	20' ht., 20' spread, moderate, upright, plant tree form only	Drought tolerant once established, can become chlorotic in alkaline soils, brilliant red-orange fall color, requires full sun, tolerant of road salt spray
Maple, Tatarian Acer tataricum	20'-25' ht., 15'-20' spread, oval to rounded, plant tree form only	Drought tolerant once established, seeds are a rosy- red color, yellow to orange fall color, requires full sun, tolerant of road salt spray
Redbud Cercis canadensis	20-25'ht., 20-25'spread, moderately globe-shaped, plant tree form only	Moist to adaptable water requirements, needs protected location, <u>pink to lavender blossoms</u> in early spring, yellow fall color, prefers filtered shade to shade
Serviceberry Amelanchier x grandiflora ('Autumn Brilliance' or 'Cole Select')	25' ht., 15' spread, round, plant tree form only	Adaptable water requirements once established, tolerates acid, wet & dry soils, white flowers in spring, red-orange fall color, grows in sun or shade, tolerant of road salt spray

Medium Maturing Trees (30'-40' Mature Height)

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Goldenraintree Koelreuteria paniculata	30' ht., 25' spread, round	Drought tolerant once established, tolerates acid, alkaline & dry soil, attractive yellow flowers in mid-summer, yellow fall color, grows in full sun or partial shade
Honey locust Gleditsia triancanthos var. inermis ('Imperial')	35' ht., 35' spread, round	Drought tolerant once established, tolerates acid, alkaline, wet & dry soils, full sun to light shade, yellow fall color, cankers can be a problem, tolerant of road salt spray
Linden, Little-leaf Tilia cordata ('Greenspire')	40' ht., 30' spread, moderately pyramidal	Tolerates alkaline soil, withstands compaction, adaptable water requirements once established, salt sensitive, suckers, yellow fall color, grows in full sun or partial shade
COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Maple, Black Acer nigrum ('Greencolumn')	40' ht., 25' spread, columnar to moderately oval	Adaptable water requirements once established, susceptible to leaf scorch and sun scald thus limited use, yellow fall color, requires full sun
Pear Pyrus calleryana ('Aristocrat')	40' ht., 35' spread, pyramidal	Adaptable water requirements once established, tolerates salt & alkaline soils, attractive white flowers in spring, purple-red fall color, requires full sun or partial shade
Pear Pyrus callenyana ('Chanticleer' or 'Capital')	35'- 40' ht., 15' spread, narrow pyramidal	Adaptable water requirements once established, tolerates salt & alkaline soils, attractive white flowers in spring, reddish-purple fall color, requires full sun to partial shade
Pear Pyrus calleryana ('Redspire')	35' ht, 25' spread, pyramidal	Adaptable water requirements once established, tolerates salt & alkaline soils, attractive white flowers in spring, yellow to red fall color, requires full sun or partial shade, slight fireblight susceptibility

Large Maturing Trees (Over 40' Mature Height)

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Ash Fraxinus pennsylvanica ('Cimmaron', 'Marshall's Seedless' or 'Patmore')	45' - 50' ht., 30' - 40' spread, upright oval to broadly ovate	Adaptable water requirements once established, tolerates salt and alkaline soils, yellow fall color, tolerant of road salt spray, requires full sun
Ash Fraxinus americana ('Autumn Purple')	45' ht., 40' spread, rounded	Adaptable water requirements once established, requires some supplemental water during prolonged dry periods, tolerant of road salt spray, reddishpurple fall color, requires full sun

Bald Cypress* Taxoduim distichum	50' ht., 20' - 30' spread, moderately pyramidal	Deciduous conifer, good on both wet and dry sites once established, golden yellow fall color, tolerant of road salt spray, requires full sun
Coffeetree, Kentucky Gyminocladus dioicus	50' ht., 40' - 50' spread, moderately globe	Drought tolerant once established, tolerant of alkaline soils, tolerant of road salt spray, free from insect and disease problems, may have seed pods, requires full sun
Elm, American Ulmus americana ('Homestead' or 'Pioneer')	50' ht., 35' - 50' spread, upright oval to rounded	Highly resistant to Dutch Elm Disease, good drought tolerance once established, tolerant of road salt spray, yellow fall color
Ginkgo Ginkgo biloba ('Autumn Gold' or 'Princeton Sentry' or 'Saratoga')	50' ht., 25' - 35' spread, narrow to broad pyramidal	Good drought tolerance once established, tolerant of road salt spray, yellow fall color, requires full sun, free from insect and disease problems
Hackberry, Common Celtis occidentalis	50' ht., 40' spread, moderately globe	Drought tolerant once established, tolerant of salt and wide range of soil conditions, yellow fall color, requires full sun
COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Honey locust Gledistia triancanthos var. inermis ('Skyline' or 'Shademaster')	45' ht., 35' spread, broad pyramidal	Drought tolerant once established, tolerant of salt and alkaline soils, tolerant of road salt spray, yellow fall color, susceptible to insect & disease problems, requires full sun
Maple, Norway Acer platanoides ('Emerald Lustre' or 'Emerald Queen')	45'-50' ht., 40' spread, broad oval to globe-shaped	Adaptable water requirements once established, susceptible to leaf scorch and sun scald thus limited use, yellow fall color, requires full sun
Maple, Red Acer rubrum ('Red Sunset')	45' ht., 35' spread, upright oval	Adaptable water requirements once established, may develop chlorosis when grown in highly alkaline soils, salt sensitive, susceptible to sun scald and leaf scorch thus limited use, red-orange fall color, requires full sun
Oak, Bur Quercus macrocarpa	55' ht., 45' spread, broad oval	Drought tolerant once established, tolerant of a wide range of soil types, yellow to brown fall color, requires full sun
Oak, Swamp White Quercus bicolor	50' ht., 50' spread, round	Drought tolerant once established, good or poorly drained or compacted soils, can become chlorotic in alkaline soils, yellow fall color, requires full sun
Pine, Limber * Pinus flexilis ('Vanderwolf's Pyramid')	40' ht., 25' spread, pyramidal, upright	Does best on well drained soils, adaptable to dry clay soils, blue-green needles, requires full sun.
Spruce, Black Hills* Picea glauca densata	45' ht., 25' - 35' spread, pyramidal	Adaptable to environmental extremes once established, good tolerance to road salt spray, best in full sun, but tolerant of some shade
Spruce, Colorado* Picea pungens	45' ht., 25' - 35' spread, pyramidal	Does best on moist to average soils, most tolerant spruce for dry sites, tolerant of road salt spray, requires full sun
Spruce Serbian* Picea omorika	45' ht., 20' - 30' spread, narrow pyramidal	Tolerates acid, alkaline and dry soils, prefers moist and well-drained soils, requires full sun

*Coniferous trees are not allowed between the curb and sidewalk, curb and bicycle/pedestrian trail, or certain other locations within the City right-of-way of residential or arterial streets due to traffic sight clearance requirements.

Section 8. SHRUB CHARACTERISTICS

The following table describes the typical characteristics of specific shrubs on the Approved Shrub List for Lincoln when planted in enhanced non-paved medians, roundabouts, boulevards and parking strips located within and/or adjacent to the public right-of-way of city streets.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Genista spp. (Common Woadwaxen or Dyer's Greenwood)	2'-3' ht., 2'-3' spread	Prefers hot, sunny locations in relatively infertile soils which are dry and loamy. Thrives in limestone soil. No serious diseases. Low growing plants for poor dry soils.
Hypericum supp. (St. Johnswort)	3'-4' ht., 3'-4' spread	
Recommendations: fronosum (Golden St. Johnswort) kalmianum "Kalm St. Johnwort		
Juniperus spp. Recommendations: horizontalis (Creeping Juniper) sabina (Savin Juniper) (Broadmore) (Buffalo)	Trees and shrubs variable height and spread.	Tolerates limestone soils, full sun, pH adaptable.
Lonicera japonica, (Honeysuckie, Japanese) Recommendations: L. x xylosteadies (Emerald Mound)	A twining vine growing 15'-30'.	Full sun to part shade. Tolerant of clay soils and dry conditions.
Polygonum japonicum var. compactum	2' ht., spreading	Low growing Fleece Flower has greenish white flowers, small reddish fruit. Full sun or shade, does well in dry soil, vigorous habit.
Ribes, (Current) Recommendations: alpinum (Alpine Currant) odoratum (Clove Currant)	3'-6'ht., 3'-6' spread	Works well in high pH soil.
Rhus spp. (Sumac) Recommendations: aromatica, (Gro-low Sumac) glabra, (Smooth Sumac)	2'-2.5'ht., 6'-40' spread	Adapted to many soil types from clay to sterile soil. Tolerates very dry soil conditions. Performs well along road-sides.
Rosa spp.	Variable	New low maintenance roses tend to be pest and disease free.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Spirea spp.		
Recommendations: S. x bumalda S. x japonica		
Symphoricarpos, (Coralberry) x. chenultii	3'-6' ht., 6'-8' spread, low arching, spreading	Small, dark blue-green ovate leaves, foliage holds on late in fall. Full sun to partial-shade tolerant. Tolerant of any soil type, native on limestone and clay.

Section 9. ORNAMENTAL GRASS CHARACTERISTICS

The following table describes the typical characteristics of specific ornamental grasses on the Approved Ornamental Grass List for Lincoln when planted in enhanced non-paved medians, roundabouts, boulevards and parking strips located within and/or adjacent to the public right-of-way of city streets. This plant list will be updated administratively on a regular basis. This list is not meant to be inclusive, site conditions and design intent need to be taken into consideration while using the following list.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Bouteloua curtipendula, (Grama, sideoats) Recommendations: 'Trailways'	2'-3' ht., 1.5' spread, upright clump	Graceful foliage, flowers dangle one-sided on flowering stems like bells. Clumping, warmseason grass. Drought tolerant.
Bouteloua gracilis , (Blue Grama)	1'-2' ht., .5'-1' spread, upright clump	Fine textured, curly, narrow leaves. One sided seed spikes with eyelash-like inflorescence. Warm season grass. Tolerant of extreme heat or cold.
Buchloe dactyloides, (Buffalo grass)	4"-6" ht., 6"+ spread, spreading	Gray-green fine textured, low sod-forming warm season grass, tolerates poor soils, drought conditions, but not wet soils, needs well drained soil.
Calamagrostis acutiflora, (Feather reed grass) Recommendations: acutiflora (x) 'Karl Foerster' acutiflora (x) 'Overdam'	2'-6' ht., 2'-4' spread, upright clump	Slender, wiry leaves with taller flower stalks, turning golden brown in late summer.
Chasmanthium latifolium, (Northern Sea Oats)	2'-3'ht., clumping	Attractive drooping seed heads. Drought resistant, tolerates a variety of soil conditions. Prefers moist loamy soil.
Elymus arenarius Recommendations: glaucous, 'Blue Lyme Grass'	1'-3'ht., spreads by rhizomes.	Blue-green foliage. Tough plant, salt tolerant. Can become invasive.
Eragrostis trichoides., (Sand Lovegrass)	3' ht., upright clumping.	Cool, grass with arching seed heads. Prefers moist, well drained sandy, fertile soils.

Miscanthus sinensis, (Eulalia grass)	3'-12'ht., 3'+ spread, upright clump	Leaves grow up then out to cascade, turns various shades of tan or gold in fall, many cultivars.
Panicum virgatum (Switch Grass) Recommendations: 'Heavy Metal'	3'-3.5'ht., upright clumping	Stiff, powder blue leaves. Turns bright yellow in the fall.
Pennisetum alopecurpoides., (Chinese pennisetum) Recommendations: 'Hamlin'	3'-4' ht., 3'-4' spread, upright clump	Fine textured green foliage in summer, light brown in fall, silver-purple flower spikes. Prefers moist well drained soil.
Sporobolus heterolepis, (Prairie Dropseed Grass)	2' ht., 1.5'-2' spread, upright arching	Narrow leaved, fragrant native grass, emerald in summer, gold in fall, panicles of small flowers.
Schizachyrium scoparium (Little bluestem)	1'-2' ht., 1' spread, upright clump	Green leaves with a hint of blue at the base, red throughout fall and winter, blue cultivars available, native

Section 10. PERENNIAL CHARACTERISTICS

The following table describes the typical characteristics of specific perennials on the **Approved Perennial List** for Lincoln when planted in **enhanced** non-paved medians, roundabouts, boulevards and parking strips located within and/or adjacent to the public right-of-way of city streets.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Achillea spp. (Yarrow, Milifoil) Recommendations: 'Coronation Gold' 'Moonshine'	2' ht., 2' spread, compact.	Fern-like gray-green foliage. Narrow leaves, white to yellow, red to purple flowers, full sun. Well drained soil. Some invasive varieties will tolerate drought conditions.
Amsonia spp. (Threadleaf Blue Star) Recommendations: ciliata hubrichtii	2 ½'-3' mounds	Blue flowers, thread-like leaves, nice yellow color in fall.
Artemisia spp. Recommendations: abrotanum 'Southernwood'	1'-5'ht., 1.5'-3' spread, can be variable	Grey to silver leaves, range from tall erect to low mounding plants. Thrive in ordinary soil. Prefers poor, well drained soil.
Asclepias spp. (Silkweed) Recommendations: tuberosa, 'Butterfly Milkweed'	2'-3' ht.	Wildflower. Native wet-land plant. Tough durable plant once established.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Aster spp. Recommendations: fendleri [rock aster] novae-angliae 'Purple Dome' novi-belgii 'Snowball'	2'-3' ht., 1.5' spread, can be variable.	Stout hairless stems, many different colors and sizes of flowers available. Prefers full sun, high organic well drained soil. Some varieties are stoloniforous.
Callirhoe spp., (Wine cups, Purple poppy mallow) Recommendations: alcaeoides 'Logan Calhoun' bushii, 'Bush's Poppy Mallow' involucrata, 'Wine Cup'	8"-12"ht., 1' spread, spreading.	Low growing with cut leaves, pink, purple or white cup shaped flowers, flowering all summer, native, full sun.
Coreopsis spp. Recommendations: auriculata, 'Nana' grandiflora, 'Early Sunrise' palmata, 'Stiff Coreopsis' verticillata, 'Moon Beam & Zagre'	9"'-2' ht., 1'-3' spread.	Dark green leaves to feathery leaves. Bright yellow flowers, thrives in full sun, well drained soil. Drought tolerant.
Euphorbia spp. Recommendations: myrsinites, polychroma, nicaeensis	1'-3'ht., 1-3' spread.	Tolerates dry, well drained, poor soils. Bushy erect with blue green, glaucous fleshy leaves. Clusters of yellow flowers.
Gaillardia spp. (Blanket Flower) Recommendations: grandiflora 'Baby Cole, Goblin & Monarch'	18"-25"ht., 12" spread.	Seeding wild flower. Daisy-like flower with many shades of yellow, scarlet and bronze. Heat and drought tolerant. Needs well drained soil.
Geranium spp. (Cranesbill) Recommendations: endressii, 'Wargrave Pine' 'Johnson Blue' macrorrhizum, sanguineum	1'ht., 1.5'spread. Moundy	Very hardy and durable, full sun, ordinary soil, long blooming, essentially pest and disease free. Require well drained soil. Good fall red color.
Hemerocallis spp. (Daylily) Recommendations: many varieties	1'-4' ht., 2'-3' spread, arching leaves.	Wide color range of trumpet flowers blooming from early summer to early autumn. Prefers high organic soil-well drained soil. Fairly heat and drought tolerant.
Knautia macedonica, Recommendations: 'Scabiosa rumelica'	2'ht., 2'spread.	Many tiny dark purple to dark red scabiosa like flowers. Prefers warm, sunny, dry sites including sloping landscapes.
Lespedeza spp. (Bush Clover) Recommendations: bicolor, 'Bush Clover' capitata, 'Round-headed L.' virginica, 'Slender Bush Clover'	2'-3'ht., 2'-3'spread.	Native, warm-season, deep-rooted hardy perennial legume. Clusters of small purple, white or pink flowers in August and September.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Liatris spp. (Blazing Star or Gayfeather) Recommendations: aspera, 'Rough Blazing Star' punctata spicata, "Floristan Violett)	2'-4' ht., 1.5' spread, erect.	Glabrous stems with sessile flower heads, purple florets with purple bracts, native, drought resistant, full sun, well drained soils.
Linaria spp. Recommendations: purpurea, 'Purple Toad Flax'	3' ht.	Attractive grey-green narrow leaves. Snapdragon like flowers of pink and purple
Linum spp. (Flax) Recommendations: perenne, 'Lewisii'	10"-18"ht.	Pretty-blue flowers-native
Nepeta spp. (Catmint) Recommendations: x faassenii, 'Faassen's Catnip' x faassenii, 'Walker's Low'	8"-3'ht., 2'-3' spread.	Aromatic plants with small gray-green foliage. Thrive in hot, sunny areas in well drained soil. Drought tolerant.
Oenothera spp. (Evening Primrose or Sundrops) Recommendations: fruticosa subsp. glauca macrocarpa, 'Silver Blade' m., 'Comanche Campfire'	9"-2' ht., 2' spread, sprawling.	Large lemon-yellow flowers, native plant with narrow dark green or silvery leaves, requires full sun and fertile soil with free drainage but tolerates poor, dry soil.
Origanum laevigarum (Herrenhausen)	2'ht., and equal spread	Sub-shrub with small aromatic leaves. Small pink flowers and red-purple bracts. Late summer to fall color.
Penstemon spp. (Beard Tongue) Recommendations: barbatus, 'Praecox Nanus' grandiflorus, 'Shell-Leaf P.'	8"-3' ht., 2'-3' spread, erect stem.	Showy flowers, full sun, well drained, non- fertile soil with little to no organic matter.
Petalostemon spp. (Prairie Clover) Recommendations: candidum, 'White Prairie Clover' purpureum, 'Purple Prairie Clover'	2'-3' ht., 2''-3' spread.	Erect prairie legume with cylindrical heads of flowers, whites, and purples. Native to U.S.
Persicaria spp. (Formerly Polygonum) Recommendations: affinis, 'Himalayan Border Jewel' amplexicaulis, 'Rosea'	4"-30"ht. Spreading.	Creeping ground-cover. Glossy green leaves with light pink flowers. Heat and drought tolerant.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Perovskia atriplicifolia, (Russian Sage) Recommendations:	3'-4' ht., 1.5'-2' spread up-right habit.	Silvery Gray stems and fine foliage, erect and stiff. Spikes of lavender blue flowers. Drought tolerant but requires good drainage.
dwarf variety		
Pycnanthemum muticum (Mountain Mint)	12"-30" ht.	Fragrant purple to lavender flower color in tufts of silver foliage.
Rudbeckia spp . (Black -eyed Susan) Recommendations: fulgida, 'Goldstrurm' nitida, 'Hersestonne'	18"-30"ht., 3' spread, erect.	Lanceolate leaves on long petioles, smaller stem leaves are sessile, flowers are bright orange yellow rays with brownish purple blunt disks, full sun.
Salvia spp. Recommendations: nemorosa, 'Blauhugel' n: x 'Mainacht' verticillata 'Purple Rain'	18'ht., 24" spread.	Drought tolerant, requires good drainage and regular soil. Violet-blue flowers with oblong green leaves.
Sedum spp. (Stonecrops) Recommendations: 'Herbstfreude' [Autumn Joy]	1"-2' ht., 1' spread, spreading to upright.	Simple stems with fleshy sessile leaves, dense clusters of pink to red to purple flowers, winter interest, full sun. Prefers well drained soil. Drought tolerant.
Senecio doria Recommendations: plattenensis, "Prairie Ragwort"	16-18" ht.	Yellow flowers with orange centers blooming from May to June. Basal leaves have maroon undersides. Native to dry prairies
Solidago spp. (Golden Rod) Recommendations: sphacelata, 'Golden Fleece' 'Wichita Mountains'	10"-30"ht.	Spike-like racemes of golden flowers in late summer and fall. Drought resistant. Native species can spread rapidly.
Stachys spp. (Betony, Lambs Ears, Woundwort) Recommendations: byzantina, 'Helen von Stein' byzantina, 'Silver Carpet'	1' ht., 1.5' spread.	Silvery foliage spreads to form a thick mat of white-wooly leaves. Tolerates hot conditions, poor soils but requires good drainage.
Yucca spp. (Adam's needle or Soap Weed)	3'-6' ht., 2'-3' spread, clumping.	Gray-green leaves tipped with spines, tall stalks of bell-shaped flowers, spines may be a safety hazard, full sun.
Soap weea)	clumping.	

1	Table 27.31.090(a)							
		Lot Area (Sq. ft.)	Req'd Front Yard	Req'd Side Yard	Req'd Rear Yard	Height		
2	Dwellings	2,000 per unit	50' <u>**</u>	20'	50'	40'		
3	Other			0',	0',			
4 5	Permitted Uses	0	50' <u>**</u>	20'* when abutting residential district	50'* when abutting residential district	40'		
5 7		* When a side or rear yard abuts a residential district, it shall be screened in conformance with the landscape design standards adopted by the City of Lincoln.						
8		** 30' when the required front yard abuts a major street having a right-of-way width of 120', as shown or described for such streets in the comprehensive plan.						
) I		20' when the required front yard abuts a major street having a right-of-way width in excess of 120', as shown or described for such streets in the comprehensive plan.						
2	(b) T	(b) There shall be a required front yard on each street side of a double frontage lot;						
3	(c) There shall be a required front yard on each street side of a corner lot; provided,							

- (c) There shall be a required front yard on each street side of a corner lot; provided, however, that the buildable width of a lot of record on April 29, 1963, need not be reduced to less than twenty-eight feet except where necessary to provide a required side yard of not less than five feet in place of one of the required front yards;
 - (d) Accessory buildings shall not extend into any required yard;
- (e) Open space requirements for residential use: A minimum amount of usable and accessible open space must be provided for each residential use. This requirement shall be as follows:
 - 125 square feet for the first dwelling unit;
- 22 80 square feet per unit for the next four dwelling units;

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- 23 25 square feet per unit for the next four dwelling units;
- 24 20 square feet per unit for each additional dwelling unit beyond nine.

1	This	open spa	ace requirement may be met in the following manner:			
2		(1)	The required rear yard may be counted; however, the required front and side			
3	yards may no	ot be co	unted toward fulfillment of said open space requirement, except for porches,			
4	balconies, an	d terrac	es as permitted in Sections 27.71.100 and 27.71.110;			
5		(2)	Parking spaces, and land occupied by any building or structure may not be			
6	counted towa	ırd fulfi	llment of this open space requirement;			
7		(3)	Required open space may be provided either on a balcony four or more feet			
8	in depth or or	n a roof	top; provided, the roof is designed and surfaced in such a manner that it may			
9	be developed	with ar	eas of planting, open space, recreation, and other uses that are consistent with			
10	similar uses	in grou	nd-level side and rear yards for dwellings. Such rooftop areas may not be			
11	occupied by structures such as vents, exhaust intakes, or other mechanical devices, except where					
12	they do not in	nterfere	with the usable nature of the open space.			
13		(4)	The depth-to-width ratio of any area used to fulfill the open space requirement			
14	may not exce	ed three	e to one if the smallest dimension of the open space is twelve feet or less.			
15		Section	on 3. That Section 27.37.060 of the Lincoln Municipal Code be amended to			
16	read as follow	vs:	•			
17	27.37.060	Heigh	nt and Area Regulations.			
18	The n	naximu	m height and minimum lot requirements within the B-5 Planned Regional			
19	Business Dis	trict sha	ll be as follows:			
20	(a)	The re	equired front yard abutting a non-major street or private roadway shall be fifty			
21	feet. The req	uired fr	ont yard abutting a major street shall be thirty feet when the major street has			
22	a right-of-wa	y width	of 120 feet, as shown or described for such streets in the comprehensive plan,			
23	and the requi	red fron	t yard shall be twenty feet when such right-of-way width is in excess of 120			

1	feet, as shown or described for such streets in the comprehensive plan. The required front yard shall				
2	be entirely landscaped, except for the necessary paving of walkways and driveways to reach parking				
3	and loading areas in the side or rear yards, provided that any driveways which traverse the front yard				
4	shall not be wider than thirty feet.				
5	(b) There shall be a required yard of 100 feet wherever a lot abuts a residential district,				
6	and such yard shall be screened in conformance with the landscape design standards adopted by				
7	resolution of the City Council.				
8	(c) There shall be a required front yard along each street side of a double-frontage lot.				
9	(d) There shall be a required front yard along each street side of a corner lot.				
10	(e) The maximum permitted height shall be forty feet.				
11	(f) Open space requirements for residential use: A minimum amount of usable and				
12	accessible open space must be provided for each residential use. This requirement shall be as				
13	follows:				
14	125 square feet for the first dwelling unit;				
15	80 square feet per unit for the next four dwelling units;				
16	25 square feet per unit for the next four dwelling units;				
17	20 square feet per unit for each additional dwelling unit beyond nine.				
18	This open space requirement may be met in the following manner:				
19	(1) The required rear yard may be counted; however, the required front and side				
20	yards may not be counted toward fulfillment of said open space requirement, except for porches,				
21	terraces, and balconies as permitted in Sections 27.71.100 and 27.71.110;				
22	(2) Parking spaces, and land occupied by any building or structure may not be				
23	counted toward fulfillment of this open space requirement;				

1	(3) Required open space may be provided either on a balcony four or more fee
2	in depth or on a rooftop, provided that the roof is designed and surfaced in such a manner that it may
3	be developed with areas of plantings, open space, recreational, and other uses that are consistent
4	with similar uses in ground-level side and rear yards for dwellings. Such rooftop areas may not be
5	occupied by structures such as vents, exhaust intakes, or other mechanical devices, except where
6	they do not interfere with the usable nature of the open space;
7	(4) The depth-to-width ratio of any area used to fulfill the open space requirement
8	may not exceed three to one if the smallest dimension of the open space is twelve feet or less.
9	(g) Accessory buildings which are attached to or not located more than ten feet from the
10	main structure shall be considered a part of the main structure and shall comply with the height and
11	yard requirements of the main structure. Accessory buildings not a part of the main structure may
12	be located in the required rear yard if such yard does not abut a residential district or use, but such
13	accessory buildings may not occupy more than thirty percent of the required rear yard and shall not
14	be nearer than two feet to any side or rear lot line, nor more than fifteen feet in height. A garage
15	which is entered from an alley shall not be located closer than ten feet to the alley line.
16	Section 4. That Section 27.45.070 of the Lincoln Municipal Code be amended to
17	read as follows:
18	27.45.070 Height and Area Regulations.
19	The maximum height and minimum lot requirements within the H-4 General Commercial
20	District shall be as follows:

(a)

General requirements:

1	Table 27.45.070(a)						
		Lot Area (Sq. ft.)	Frontage	Req'd Front Yard	Req'd Side Yard	Req'd Rear Yard	Height
2 3 4	All permitted uses	15,000	75'	50'* <u>, **</u>	20'; 50'* if abutting residential district	20'; 50'* if abutting residential district	35'
5 6			•	a residential dist e design standar	•		oln.
7 8		* 30' when the required front yard abuts a major street having a right-of-way width of 120', as shown or described for such streets in the comprehensive plan.					
9 10		20' when the required front yard abuts a major street having a right-of-way width in excess of 120', as shown or described for such streets in the comprehensive plan.					

- (b) There shall be a required front yard on each street side of a double frontage lot.
- (c) There shall be a required front yard on each street side of a corner lot; provided, however, that the buildable width of a lot of record on November 2, 1953, need not be reduced to less than twenty-eight feet except where necessary to provide a required side yard of not less than five feet in place of one of the required front yards.
- (d) Accessory buildings which are attached to or not located more than ten feet from the main structure shall be considered a part of the main structure and shall comply with the height and front, side, and rear yard requirements of the main structure. Accessory buildings not a part of the main structure may be located in the required rear yard if such yard does not abut a residential district, but such accessory buildings may not occupy more than thirty percent of the required rear yard and shall not be nearer than two feet to any side or rear lot line. Such detached accessory buildings shall not exceed fifteen feet in height. Accessory buildings not a part of the main structure, if located not less than sixty feet from the front lot line, may extend into the required side yard

- though not nearer than two feet to the side lot line. A garage which is entered from an alley shall
 not be located closer than ten feet to the alley line.
 - (e) Dwellings existing in this district on the effective date of this title shall be considered nonstandard uses in conformance with the provisions of Chapter 27.61.
- 5 Section 5. That Section 27.51.090 of the Lincoln Municipal Code be amended to reas 6 as follows:

27.51.090 Height and Area Regulations.

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Minimum area for the establishment of the I-3 Employment Center District is fifty acres.

The maximum height and minimum lot requirements within the I-3 Employment Center District shall be as follows:

(a) General Requirements.

12	Table 27.51.090(a)						
		Lot Area (Sq. ft.)	Frontage	Req'd Front Yard	Req'd Side Yard	Req'd Rear Yard	Height
13 14	27.51.030(c)(3) Uses	0	150'	50' <u>***</u>	20'*	20'*	55'**
15	Retail	0	50'	50'***	20'*	20'*	45'**
16	Office	0	50'	50'***	20'*	20'*	45'**
17	Other	0	50'	50'***	20'*	20'*	35'

- * When a side or rear yard abuts a residential district, required yard shall be 50 feet and screened in conformance with the landscape design standards adopted by the City of Lincoln.
- * * When a side or rear yard of an Employment Center or an office/retail use abuts a residential district, the maximum height of any improvement located within 150 feet of the residential district shall be 35 feet.
- *** 30' when the required front yard abuts a major street having a right-of-way width of 120', as shown or described for such streets in the comprehensive plan.

20' when the required front yard abuts a major street having a right-of-way width in excess of 120', as shown or described for such streets in the comprehensive plan.

1	(b)	There shall be a required front yard on each street side of a double-frontage lot.
2	(c)	There shall be a required front yard on each street side of a corner lot.
3	(d)	Accessory buildings shall comply with the height, and front, side, and rear yard
4	requirements	s of the main structure.
5	(e)	All required yards shall be entirely devoted to landscaping, except for necessary
6	paving of wa	alkways and driveways to reach parking and loading areas from a public or private
7	street, and pr	rovided, further, that any driveways which intersect the front yard shall not be wider
8	than thirty fe	et.
9	(f)	No loading facilities shall be located in any required yard. Loading facilities located
10	within 150 f	eet of any street shall be visually screened.
11		Section 6. That Section 27.67.030 of the Lincoln Municipal Code be amended to
12	read as follow	ws:
13	27.67.030	General Conditions.
14	The f	following general conditions shall apply, except as otherwise modified in this title:
15	(a)	No parking space is permitted in the required front yard in any district except as
16	follows:	
17		(1) Parking in the front yard is permitted in the B-1, H-1, H-2, and H-3 zoning
18	districts, exc	ept in the front six feet; and
19		(2) Parking in the front yard is permitted in the B-3, R-1, R-2, R-3, and R-4 zoning
20	districts for p	passenger cars, pickup trucks, or vans outside of an enclosed structure on a concrete
21	driveway or	its equivalent under the following conditions:

1	(i) The width of such parking area shall not exceed thirty-five percent of the
2	width of the front yard;
3	(ii) The parking area shall be not less than two feet from and parallel to the
4	side lot line and not less than two feet from the front property line.
5	(iii) Except in B-3 zoning districts, the property shall be used for one- and
6	two-family dwellings;
7	(3) Parking in the front yard may be permitted in the I-2 zoning district under the
8	following conditions:
9	(i) Such parking shall be allowed only within the rear twenty-five feet of the
10	front yard.
11	(ii) The front yard to be used for parking shall abut a private road ending in
12	a cul-de-sac.
13	(iii) Such parking shall be in lieu of guest parking permitted in the front yard
14	under Section 27.49.080(e).
15	(iv) The front yard landscaping requirements shall be doubled.
16	(b) No parking space is permitted in the required side yard in any district except as
17	otherwise provided in this chapter.
18	(c) Parking spaces are permitted in any required rear yard.
19	(d) All required parking spaces shall be provided on the same lot as the use for which
20	they are required.
21	(e) Any parking requirement resulting in a partial parking space shall be rounded up to
22	the next whole number.
	9

- (f) Where additional parking is required by this chapter due to a change in use and provision for such additional parking is not made, a special review and approval shall be required by the City Council.
- (g) For single-family dwellings and two-family dwellings in the R-1, R-2, R-3 and R-4 zoning districts, the required parking spaces may be stacked front-to-back, one vehicle deep.
- Section 7. That Section 27.71.080 of the Lincoln Municipal Code be amended to read as follows:

27.71.080 Fences.

Notwithstanding the area regulations of this title with the requirements for open space for front yard, side yard, and rear yard, fences may be erected to a height not to exceed seventy-six inches on any part of a lot or premises, provided, that fences may be erected to a height not to exceed ninety-six inches in the required front yard abutting a major street if the following conditions are met:

- (a) The lot or premises has double street frontage and abuts a major street;
- (b) Vehicular access to the lot or premises is not from the major street; and
- (c) The fence shall be parallel to the major street.

However, no fence shall be erected within the triangular area required for sight distance of vehicles entering or exiting the property or entering an adjacent intersection, in conformance with the design standards of the city and the "guidelines and regulations for driveway design and approach." The height of a fence shall be determined by a measurement from the ground beneath the fence. Swales and other earth depressions up to six feet wide shall not be used when measuring the fence's height. Man-made earth berms, terraces, and retaining walls that elevate the fence shall be considered a part of the fence. Notwithstanding the above, if a lot or premises is lower than an

adjacent major street, as defined in Section 26.07.190 of the Land Subdivision Ordinance, then the height of the fence shall be determined by a measurement from the street grade at a ninety degree angle from the fence; provided, however, the total vertical measurement from the ground beneath the fence to the top of the fence shall not exceed twelve feet.

The height limitation herein provided for fences permitted on any part of a lot or premises, notwithstanding the area regulation of this title with the requirements for open space from front yard, side yard, and rear yard, shall not apply to fences required by the city for uses permitted by the city. It is not intended that any structure other than a fence is permitted on any part of a lot or premises by this section, and all other structures must comply with area and use regulations of this title.

Any fence installed on a double frontage lot that separates the double frontage lot from the abutting public property shall be required to have a gate or other opening in the fence at least 36 inches in width in order to allow the owner of the double frontage lot ingress and egress to the abutting public property to facilitate such owner's duty to perform routine care of such public property and to remove snow and ice from the sidewalks in front of such lot. Notwithstanding the above, if all of the double frontage lot owners are part of a homeowners association and said owners have covenanted and agreed to have said maintenance performed by the homeowners association, the gate or other opening in the fence is not required.

Section 9. That Sections 27.31.090, 27.37.060, 27.45.070, 27.51.090, 27.67.030, and 27.71.080 of the Lincoln Municipal Code as hitherto existing be and the same are hereby repealed.

l	Section 10. That this ordinance shall take effect and be in force from and af			
2	passage and publication according to la	w.		
		Introduced by:		
	Approved as to Form & Legality:			
	City Attorney	_		
		Approved this day of	, 2005:	
			, 2000.	
		Mayor		

	٠.	_	
(1	٦.	_

Introduce:

of-way is required on the building line

map.)

	AN ORDINANCE amending Title 26	of the Lincoln Municipal Code relating to the			
Land Subdi	vision Ordinance by amending Section 20	5.23.040 to revise the right-of-way width for			
major streets; by amending Section 26.23.095 to allow sidewalks to be located in an easement					
utilized as p	part of the required width of a major stre	et; by amending Section 26.23.120 to allow			
sidewalks ar	nd streets trees to be located within an eas	ement utilized as part of the width of a major			
street; and	amending Section 26.27.090 to allow st	reet trees to be planted within an easement			
utilized as	part of the width of a major street; and	d repealing Sections 26.23.040, 26.23.094,			
26.23.120 a	nd 26.28.090 of the Lincoln Municipal C	ode as hitherto existing.			
	BE IT ORDAINED by the City Counc	eil of the City of Lincoln, Nebraska:			
	Section 1. That Section 26.23.040 of	the Lincoln Municipal Code be amended to			
read as follo	ows:				
26.23.040	Street and Other Public Way Width	is.			
(a)	The width of all rights-of-way shall con	form to the widths prescribed herein and shall			
be determin	ed pursuant to the comprehensive plan.				
(b)	The minimum right-of-way widths sha	all be as follows:			
Clas	sification	Width			
Urban majo	r streets -	80 fee			
•	ets and roads shown on the future	(except when more right-of-way is			
	n street and road network map in	shown or described for such streets in			
the c	omprehensive plan).	the comprehensive plan or less right-			

ORDINANCE NO. _____

1	<u>Major</u>	r streets 100 feet to 150 feet	
2		(As shown or described for such	
3		streets in the comprehensive plan)* **	
4	Nonu	rban major streets 100 feet	
5		(Streets and roads shown on future	
6		county street and road network map in	
7		the comprehensive plan).	
8		and completionary of party.	
9	Colle	ctor streets	
10	Local	Local streets:	
11	Local		
		Commercial, business, or industrial	
12 13		zoning district	
14		Residential 60 feet	
15	Cul-d	e-sacs:	
16	0	Residential 60-foot radius	
		20030000000000000000000000000000000000	
17		Commercial, business, or industrial	
18		(In accordance with design standards)	
		(
19	Alley	s	
20	Pedes	trian ways 5-foot easement for the sidewalk	
21	Bikev	vays	
22	*	The outer 10 feet of the right-of-way on each side of a major street which is in excess of 50	
23	_	feet from the centerline may be shown as an easement for street purposes rather than a fee	
24		dedication with the approval of the Planning Commission.	
25	**	The typical cross sections for major streets having a width of 120 feet and 130 feet are set	
26		out in Figures A, B, C, and D at the end of this chapter.	
27		Section 2. That Section 26.23.095 of the Lincoln Municipal Code be amended to	
28	read a	s follows:	
		2	

26.23.095 Sidewalks.

Concrete sidewalks shall be constructed in pedestrian ways and on both sides of all streets, including collector and major streets, or in easements utilized as part of the required width of a major street, in compliance with applicable design standards of the city. The city may approve alternate locations for sidewalks pursuant to the following criteria:

- (a) The location of the alternate sidewalk must be predominantly parallel to the street where the standard sidewalk would have been required.
- (b) The alternate sidewalk shall be illuminated and connected at its extremities to the sidewalk located in the abutting street.
 - (c) Sidewalks shall be constructed to the limits of the subdivision in the abutting streets.
- (d) The minimum length of the sidewalk allowed to be placed in the alternate location shall not be less than 660 feet.
- (e) The distance between the alternate sidewalk location and the standard sidewalk location shall not be greater than fifteen percent of the total length of the alternate sidewalk.
- (f) An easement permitting public use of the sidewalk and ensuring continual maintenance and availability to the public of the sidewalk shall be provided for all sidewalks approved at alternate locations and located outside of the public right-of-way.
- Section 3. That Section 26.23.120 of the Lincoln Municipal Code be amended to read as follows:

26.23.120 Easements.

Easements shall be provided and dedicated where necessary for wires, cables, conduits, fixtures and equipment for distribution of electric power, wastewater collectors, storm drains, overland stormwater flow routes, sidewalks, pedestrian ways, bikeways, private roadways, and water

mains at such locations and widths as determined by the city. The width of easements required for public wastewater collectors, storm drains, and/or water mains shall be as specified in the design standards for the particular improvement adopted by the city. It is the policy of the city to locate all necessary utilities in the right-of-way, in easements for street right-of-way where dedication of the fee would reduce the ability to develop the site, or in easements abutting rear or side lot lines, except on double frontage lots. Deviations from this policy may be made when it is demonstrated that the utility is necessary and no practical alternative locations exist.

Easements shall be provided along each side of a stream, watercourse, or river for the purpose of preserving area designated for compensatory storage where required in the floodplain or floodprone area, or for establishing a minimum flood corridor or a surface drainage course along that stream, watercourse, or river when the area adjacent thereto is being subdivided; such easements shall be of a width deemed necessary by the city. The easement is for the purpose of widening, deepening, sloping, improving, cleaning, or protecting the stream, watercourse, or river for drainage purposes. Said easement shall be provided in appropriate locations as determined by the city for the purpose of permitting the flow and storage of flood water. Minimum flood corridors shall be preserved and dedicated along drainage ways which have a defined bed and bank or drain an area equal to or greater than 150 acres, for purposes of preserving riparian vegetation and preventing encroachment within the corridors by buildings, fill, or structures; provided, however, that encroachments within the corridors will be permitted in accordance with Chapter 2.05 (Stormwater Drainage Design Standards) of the City of Lincoln Design Standards and Flood Design Criteria. Within the Existing Urban Area, minimum flood corridors shall not be required within the FEMAmapped floodplain.

In any dedication of an easement, the city may prohibit or restrict buildings, fences, driveways and other improvements; may enter for construction, reconstruction, replacement, repair, operation, and maintenance purposes; and will be held harmless for the cost of replacement or damage to any improvement or vegetation within the easement and may make any other appropriate or necessary requirements.

It is the policy of the City to locate all sidewalks in the street right-of-way. The subdivider may deviate from this policy when (1) the sidewalks are to be located within an easement utilized as part of the required width of a major street, or (2) the sidewalks are approved to be located at an alternate location pursuant to Section 26,23.095.

It is the policy of the City to locate all street trees in the street right-of-way. The subdivider may deviate from this policy when the street trees are located within an easement utilized as part of the required width of a major street.

Section 4. That Section 26.27.090 of the Lincoln Municipal Code be amended to read as follows:

26.27.090 Trees.

Trees shall be planted along both sides of all streets and private roadways within the subdivision and on the side of the streets and private roadways which abut the subdivision. The trees shall be planted in the public right-of-way, except provided that along major streets in which case the trees shall be planted on the private property abutting such major streets may be planted in an easement utilized as part of the required width of the major street. Notwithstanding the above, the tree requirements are not required in that part of a subdivision located outside the city limits where all lots contain an area of one or more acres.

1	Section 5. That Sections 26.23.040, 26.23.094, 26.23.120 and 26.28.090 of the Lincoln
2	Municipal Code as hitherto existing be and the same are hereby repealed.
3	Section 6. That this ordinance shall take effect and be in force from and after its passag
4	and publication according to law.
	Introduced by:
	Approved as to Form & Legality:
	City Attorney
	City Attorney
	Approved this day of, 2005:
	Mayor
	may a.